

IN THE DRAWINGS:

In Figs. 2, 11, and 15, please insert – PRIOR ART –.

REMARKS

This application has been reviewed in light of the Office Action dated September 20, 2005. Claims 1, 5 and 9-17 are presented for examination. Claims 2, 3, 4, 6, 7 and 8 have been cancelled, without prejudice or disclaimer of the subject matter presented therein. Claims 1 and 5 have been amended to define still more clearly what Applicants regard as their invention. New Claims 9-17 have been added to provide Applicants with a more complete scope of protection. Claims 1, 5, 10, 15, 16 and 17 are the independent claims under consideration. Favorable reconsideration is requested.

Drawings

Figs. 2, 11 and 15 have been labeled --Prior Art--, as required in the Office Action. Replacement sheets are included with this response.

Specification

The specification has been amended to correct certain informalities, as suggested by the Examiner at pages 2-3 of the Office Action. Since Applicant is free to act as his own lexicographer, Applicant believes that use of the word "electronized" is appropriate. One skilled in the art would clearly appreciate the word "electronized" as meaning "converted to electronic form", in view of the specification.

Claims

Claims 1-8 were rejected under 35 U.S.C. § 112, second paragraph, for the reasons set forth from section 8 to section 20 of the Office Action. Without conceding the propriety of these rejections, it is believed that the amendments, or cancellations, as the case may be, of claims herein obviate each rejection under section 112. Moreover, Applicants know of no USPTO rule or case law which stands for the proposition that the use of “each” or “measuring” before a claim term constitutes a lack of antecedent basis or an omission of essential elements, especially where the term appears earlier in the same claim (at least in the case where “each” is recited). Accordingly, the section 112 rejection given with respect to the usage of “each” and “measuring” in the claims is traversed. If the Examiner does not agree to withdraw the rejection, he is respectfully requested to cite a rule or law which he believes supports his position.

In view of the foregoing, withdrawal of the rejections are respectfully requested.

Claims 1-8 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent 6,862,029 to D’Souza et al..

Claim 1 is directed to a method of measuring luminance of an image display apparatus having a plurality of pixels for displaying red, blue and green, comprising a first step of causing only those ones of the plurality of pixels which display a first color among red, blue and green, arranged in a first direction in a predetermined area, to emit light in a

from the first color and are arranged in the first direction in the predetermined area, not to emit light. The other ones of the plurality of pixels are adjacent to the ones of the plurality of pixels which display the first color. A first detecting step detects each of emission statuses of the plurality of the pixels emitting light in said first step, a second step causes only those ones of the plurality of pixels which display a second color different from the first color among red, blue and green, arranged in the first direction in the predetermined area, to emit light in a second period different from the first period, and causes other ones of the plurality of pixels which display colors different from the second color and are arranged in the first direction in a predetermined area, not to emit light. These other ones of the plurality of pixels are adjacent to the ones of the plurality of pixels which display the second color. A second detecting step detects each of emission statuses of the plurality of the pixels emitting light in the second step.

One notable feature of Claim 1 is that, even though multiple pixels are caused to emit light during any one period of time, individual pixel measurements are detected. This benefit ensures accurate color correction with the highest resolution and uniformity possible.

Another notable feature of Claim 1 is that, during one period of time, only pixels that are not adjacent to each other are caused to emit light of one color and then the emission statuses of those pixels are detected before any adjacent pixels are caused to emit light in order to be detected during emission. This feature of Applicants invention has the benefit of substantially reducing the time to cause all the pixels of an image display to emit

light and to have their emission statuses be detected. This time reducing benefit is derived from the fact that the interval of driving two adjacent pixels sequentially includes a time period corresponding to the duration of after-glow of the first pixel that is not a factor when measuring two pixels sequentially that are not adjacent. In addition, the benefit of more accurate detection of the emission statuses of the pixels is present in the invention of Claim 1 because non-adjacent measuring avoids the measurement aberrations due to influence from adjacent devices such as color mixture, misalignment of the fluorescent material, or displacement of the irradiating position of the electron beam.

D'Souza et al., as understood by Applicants, relates to a color display system which is comprised of a color display device which stores color correction data, and a computer that can load the correction data and create a video signal based on the color correction data. (See D'Souza claim 1). Brightness values for a given voltage are detected by measuring one pixel or a group of pixels at one time for each of several colors from minimum to maximum brightness. (See column 2, lines 18-22 and lines 60-67; column 3, lines 12-22). If more than one pixel is caused to emit light, the brightness of the resulting pattern made up of several pixels, and not that of each individual pixel, is detected. (See column 6, lines 22-32). Then, coefficients of the input-output color characteristic equation are calculated and stored to later allow a connected computer to adjust video driver parameters each time a video signal is transmitted from the computer video driver circuitry to the image display device. (See column 2, lines 24-37; column 3, lines 41 - column 5, line 38).

It is respectfully submitted that nothing in D’Souza teaches or suggests that luminance is determined for each individual pixel at one driving voltage, or that brightness is only measured for non-adjacent pixels at one time. In addition, nothing in D’Souza teaches or suggests measuring brightness of each individual pixel emitting light if more than one pixel is caused to emit light during one period of time. According to Claim 1 of Applicants’ invention, the plurality of pixels adjacent to those emitting light of a particular color, are not emitting light at the same time as those emitting light. In addition, according to Claim 1, the emission status of each pixel is detected regardless of how many pixels are caused to emit light during one period of time. D’Souza is not understood to teach or suggest these features.

Accordingly, Applicants respectfully submit that Claim 1 is patentable over D’Souza et al.

Independent Claim 5 is directed to a method of manufacturing an image display apparatus that includes substantially similar steps relating to emission and detection as those discussed above in connection with Claim 1, and additionally, includes an adjustment step of adjusting the characteristics of the pixels based on the result obtained for each pixel in the detecting steps.

Claim 5 is believed to be patentable over D’Souza et al. for at least the same reasons as those discussed above in connection with Claim 1.

Newly added independent Claims 10, 15, 16 and 17 are believed to be patentable over D’Souza et al. for at least the same reasons as those discussed in

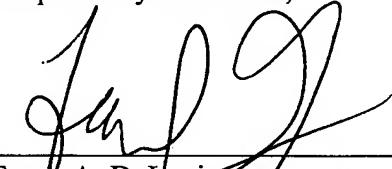
connection with Claim 1, because they also recite substantially similar features as those emphasized above from Claim 1.

The other claims in this application are each dependent from one or another of the independent claims discussed above and are therefore believed patentable for the same reasons. Since each dependent claim is also deemed to define an additional aspect of the invention, however, the individual consideration or reconsideration, as the case may be, of the patentability of each on its own merits is respectfully requested.

In view of the foregoing amendments and remarks, Applicants respectfully request favorable reconsideration and early passage to issue of the present application.

Applicants' undersigned attorney may be reached in our New York office by telephone at (212) 218-2100. All correspondence should continue to be directed to our below listed address.

Respectfully submitted,



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